

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Cancelled).

Claim 2 (Currently Amended): The ~~hexagonal lithium-cobalt composite oxide for a lithium secondary cell according to Claim 1~~ process according to Claim 5, wherein x is $0.0005 \leq x \leq 0.02$, and the half-width of the diffraction peak for (110) face is from 0.100 to 0.165°.

Claim 3 (Currently Amended): The ~~hexagonal lithium-cobalt composite oxide for a lithium secondary cell according to Claim 1~~ process according to Claim 5, wherein x is 0, and the half-width of the diffraction peak for (110) face is from 0.080 to 0.100°.

Claim 4 (Currently Amended): The ~~hexagonal lithium-cobalt composite oxide for a lithium secondary cell according to Claim 1, 2 or 3~~ process according to Claim 5, wherein the packing press density of the hexagonal lithium-cobalt composite oxide is from 2.90 to 3.35 g/cm³.

Claim 5 (Currently Amended): A process for producing ~~the a~~ hexagonal lithium-cobalt composite oxide for a lithium secondary cell ~~as defined in any one of Claims 1 to 4~~, which comprises dry blending a cobalt oxyhydroxide powder having an average particle size of from 1 to 20 μm and a specific surface area of from 2 to 200 m²/g, a lithium carbonate powder having an average particle size of from 1 to 50 μm and a specific surface area of from 0.1 to 10 m²/g, and a powder of an oxide of metal element M having an average particle size

of at most 10 μm and a specific surface area of from 1 to 100 m^2/g , and firing the mixture at a temperature of from 850 to 1,000°C in an oxygen-containing atmosphere, wherein the hexagonal lithium-cobalt composite oxide is represented by the formula $\text{LiCo}_{1-x}\text{M}_x\text{O}_2$, wherein x is $0 \leq x \leq 0.02$ and M is at least one member selected from the group consisting of Ta, Ti, Nb, Zr and Hf, and which has a half-width of the diffraction peak for (110) face at $2\theta=66.5 \pm 1^\circ$, of from 0.070 to 0.180°, as measured by the X-ray diffraction using $\text{CuK}\alpha$ as a ray source.

Claim 6 (Original): The process for producing the hexagonal lithium-cobalt composite oxide for a lithium secondary cell according to Claim 5, wherein the mixture is fired for from 4 to 30 hours.

Claims 7-11 (Cancelled).